

# Technologies, products, and services of NICHIAS that solve social issues

The NICHIAS Group provides products and services to a wide variety of fields including infrastructure that supports social foundation such as petrochemistry and electricity, automobiles supporting logistics and transportation of people, buildings and housing supporting lives, and semiconductor devices that support advanced information technologies.



## Five businesses

Energy and Industrial Plants Business
Industrial Products Business
Advanced Products Business
Autoparts Business
Building Materials Business

## Six technologies of TATSU-TAMOTSU™

	<b>Sealing technology</b>	It prevents fluid leakage from pipe joints and supports the safe operation of the facility.
	<b>Thermal insulation technology</b>	This technology contributes to energy saving by maintaining the temperature of the item that is heated (or cooled down) and insulating the heat from outside and helps reduce CO <sub>2</sub> emissions.
	<b>Soundproofing technologies</b>	Soundproofing technologies contribute to quiet and comfortable life through reducing the noise from factories and vibration sound from automobile brakes.
	<b>Fireproof technology</b>	It provides materials that protect industrial furnaces, incinerators, and buildings in fire from fire to secure safety.
	<b>Corrosion-proof technology</b>	The technology prevents corrosion and pollution caused by chemicals. For example, it plays an active role in the processes of manufacturing semiconductors and food, which have severe standards for cleaning and sanitizing control.
	<b>Clean technology</b>	It maintains cleanliness in processes that tolerate no impurity, such as semiconductor manufacturing. We pursue cleanliness to the extreme.

## 1 For rockets



Fluoropolymer hose

### NAFLON™ PFA pressure resistant hose

Hoses made of fluoropolymer that are used for rocket launching platform equipment and facility control lines.



## 2 For logistics warehouses



Wrap-Type Fire-proofing Covering Materials

### MAKIBEE™

Fire-proofing covering materials used for beams and pillars of steel construction buildings. It also contributes to labor saving in construction.



## 3 For refrigerated warehouses



### Heat insulation work

Construction work for installing heat retention and cold retention materials at such as -20°C largescale refrigerated warehouses.



## 4 For nuclear power plants



Heat retention materials for nuclear power stations

### Metallic heat retention material

All-metal heat retention material, which does not generate dust and is used for pressure vessels and piping of atomic furnaces.



## 5 For food-manufacturing plants



Sealing materials for food

### SANICLEAN™ GASKET

Odor-free and contamination-proof sealing material used for filling lines in the food manufacturing process, etc.



## 6 For semiconductor manufacturing factories

Fluoropolymer tube

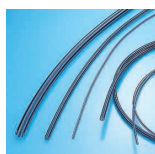
### NAFLON™ PFA-NE TUBE

Fluoropolymer tubes for preventing discharging phenomena caused by friction while maintaining the cleanness of high-purity chemicals used in semiconductor manufacturing processes.

Pipe heating and insulation jacket heater

### ENETHERMO™ PH

A jacket-type detachable heater that heats the equipment and pipes and keep them warm.



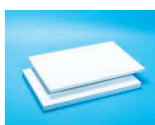
## 7 For electronic part factories (of multi-layer ceramic condensers)



Extremely high-temperature heat resistant board

### RF BOARD™

Heat-resistant board that is used in firing furnaces of multi-layered ceramic condenser (MLCC).



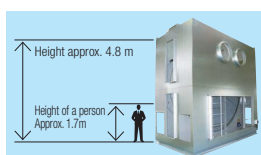
## 8 For battery factories (of lithium ion batteries)



Volatile organic compound concentrator

### SOLVENTCLEAN™

Equipment for absorbing and collecting gas, including volatile organic compounds (VOC) emitted from factories.



Industrial dehumidification rotor

### HONEYCLE™ EX-SG

This is a dehumidification rotor that generates ultra-low dew-point air (dry air) that is sent into lithium-ion battery factories.



## 9 For automobiles, 10 EVs



High-performance brake shim material

### METAPLUS™ Multi-Layer Shims

A soundproofing part to be installed onto disc brake pads. Reduces unpleasant noise generated during braking.



## 11 For alkaline water electrolysis plants



Fluororesin tube

### NAFLON™ PTFE tube processed products

A fluororesin tube manufactured with special bending processing technology.



## 12 For buildings

Raised-Access Floor Systems

### NICHIAS OMEGA FLOOR™

Raised-access floor system of double-floor structure with the office floor. It has superior walking comfort and creates a comfortable office environment.



## 13 For housing

### Furniture sliding material

Fluororesin sliding material to be attached to the bottom of furniture to facilitate their movement.



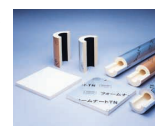
## 14 For LNG facilities, 18 ammonia hydrogen storage plants



Heat retention material for extremely low temperatures

### FOAMNERT™ TN

Polyurethane foam heat retention material used for piping in which low-temperature fluid flows.



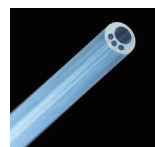
## 15 For hospitals



Medical tube

### NAFLON™ Multi-lumen tubes

Tube made of fluoropolymer with only a diameter of around 1 mm, which is used as a part of medical equipment such as endoscopes that need to be clean.



## 17 For fuel-transporting vessels



### Cold retention work

Construction work for installing heat retention materials on the piping and tanks of LNG vessels in which low-temperature fluid flows.



## 16 Waste incineration plant, 19 thermal power plant, 20 steelmaking plants



Thermal insulation material for high temperatures

### FINEFLEX BIO™ Blanket

Thermal insulation material used for boiler ceilings and furnace walls. It contributes to energy saving.



## 21 For petrochemical plants

Heat retention function recovering method

### Overlapped Heat Retention method

In this method, the heat retention performance is recovered through lap-winding new heat retention material without removing the deteriorated heat retention material.



### GASKET KOBO™

A truck that can be driven to the customer's factory and process gaskets on site. Speedy response is a feature of this service.

